

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
<i>2</i>	10/849,618	05/19/2004	Frank Niebuhr	60130-2082; 03MRA0207	. 6549
	26096 7590 09/07/2007 CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD			EXAMINER	
				KUHNS, ALLAN R	
	SUITE 350 BIRMINGHAN	M. MI 48009		ART UNIT	PAPER NUMBER
	,		1732		
				MAIL DATE	DELIVERY MODE
				09/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usplo.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/849,618

Filing Date: May 19, 2004 Appellant(s): NIEBUHR ET AL.

Theodore W. Olds
For Appellant

MAILED SEP 07 2007 GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 15, 2007 appealing from the Office action mailed November 17, 2006.

Application/Control Number: 10/849,618 Page 2

Art Unit: 1762

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

It is noted by the examiner that the summary of claimed subject matter refers to claim 1, the only independent claim.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,970,508 Gossie 7-1976

Art Unit: 1762

5,989,480 Yamazaki 11-1999

Admitted prior art specification Paragraph [0006]

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims: Claims 1-11, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art as set forth in paragraph [0006] in the specification in view of Yamazaki (5,989,480). The admitted prior art discloses or suggests the basic claimed method for manufacturing a composite part having an outer skin that is visible when the composite part is installed on a vehicle including (1) providing a foil part having the outer skin, the foil part having a removable protective foil disposed on a front or exterior side of the outer skin, the removable foil having an outer side, (2) placing the foil part together with the removable protective foil in a die or mold (the admitted prior art discloses that the foil is back-foamed, and it is well known to perform such an operation in a mold or die and such would have been obvious to one of ordinary skill in the art in order to contain the foam during the back-foaming operation), and (3) applying a plastic layer via a high pressure process (e.g., back foaming) on a rear side of the outer skin. It is submitted that the pressure is generated by the formation and expansion of gas during the back foaming operation alluded to in the admitted prior art. The admitted prior art does not teach the aspect of reworking a foil or film to smooth its surface, but such is taught by Yamazaki, in a method of molding a patterned composite product having a film layer, by stating at column 14, lines 56-67 that the film is never held in touch with a fixed mold while the film is wrinkled or twisted. Given this teaching of

Art Unit: 1762

Yamazaki, it would have been obvious to one of ordinary skill in the art to rework the foil or foils of the admitted prior art process to smooth its surface before establishing its position within a die or mold in order to prevent the foil from contacting the mold while it is wrinkled.

The admitted prior art teaches back-foaming, as in claims 2 and 10, and it is submitted that the pressure of back-foaming causes at least some reshaping while forcing the foil to conform to the mold surface, as in claim 3. The admitted prior art suggests the reshaping of claim 4 (this issue is addressed in the Advisory Action mailed March 5, 2007), and it is submitted that the back-foaming causes reshaping under influence of heat, as in claim 5. It is well known to form foil and plastic layers with the constituents of claims 6-11 and such would have been obvious to one of ordinary skill in the art in order to form commercially acceptable vehicle trim components. Providing fibers in a plastic layer, as in claims 9-11, is well known and would have been obvious to reinforce the plastic layer. The admitted prior art suggests the order of claim 22 and the forming of a mount-on vehicle body panel, as in claim 13.

Claims 12 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art as set forth in paragraph [0006] in the specification in view of Yamazaki as applied to claims 1-11, 13 and 22 above, and further in view of Gossie (3,970,508). In preparing a film for subsequent application to a surface, Gossie teaches that it is known to smooth the film by hand, at column 1, lines 5-17, to remove blisters or bubbles or wrinkles, and discloses an apparatus to smooth the film. Based on this teaching of Gossie, it would have been obvious to one of ordinary skill in the art to buff

Art Unit: 1762

or polish the film or foil of the admitted prior art in order to remove any blisters, bubbles or wrinkles.

(10) Response to Argument

Appellant states that paragraph [0006] of the specification does not disclose steps b), c) or d) in the order specified. But the only explicitly stated order is that step c) occurs sometime after step b). It is possible that an additional order of steps may be inferred both from the disclosure of paragraph [0006] and from what is implied by the steps recited in claim 1.

Appellant argues that Yamazaki does not disclose, suggest or teach the step of reworking a removable protective foil as claimed and notes that the insert film 7 of Yamazaki cannot be considered as being removable. This is not persuasive because the ground of rejection at issue is the admitted prior art in view of Yamazaki. Therefore, it is the protective foil of the admitted prior art which would be positioned adjacent the mold or die surface, and thus one of ordinary skill in the art would take steps to ensure that the protective foil is not held against the surface of the mold or die when it is wrinkled or twisted, based on the disclosure of Yamazaki at column 14, lines 56-67.

Appellant further argues even if the film layer 7 of Yamazaki is considered to be a removable protective foil, the disclosure at column 14, lines 56-67 of this reference cannot be considered to be a "reworking" since the foil or film is merely positioned within the mold under constant tension. The examiner disagrees because the purpose of the tensioning is to eliminate any twisting or wrinkling.

Art Unit: 1762

Appellant also takes issue with the examiner's position that the protective foil of the admitted prior art has already been "worked" (as a precursor to "reworking") to some extent by disposing it on an outer skin (of what is to become the final molded part) before sending it for back foaming. The examiner simply disagrees for reasons of record.

Appellant additionally argues that the teaching or suggestion to make a claimed modification and the reasonable expectation of success must be found in the prior art, not in Appellant's disclosure, and that there is no motivation or suggestion to modify the admitted prior art in the manner proposed by the examiner. But the decision by the Supreme Court in KSR International v. Teleflex Inc., 82 USPQ2d at 1396 (2007) effectively forecloses the argument that a specific teaching, suggestion or motivation is required to support a finding of obviousness.

It is further argued that the identification of the problem and the discussion of the inventive solution are only found in appellant's disclosure. The examiner disagrees. It is submitted that one of ordinary skill in the art practicing the relied upon step of Yamazaki to eliminate twists or wrinkles in the film would have an expectation that a composite molded product with improved surface quality would result when compared to the practice of a process in which twists or wrinkles in a surface film or foil were allowed to remain during molding.

Regarding claim 3, Appellant argues that the reshaping of the foil part is done after step b) as claimed, and thus the "reshaping" identified by the examiner cannot be a result of back-foaming. Appellant's reasoning in making this argument is not

Art Unit: 1762

understood by the examiner. It is submitted that the back-foaming of the admitted prior art is substantially synonymous with step d) of claim 1 and that step d) would necessarily occur after step c) (which claim 1 states is subsequent to step b)) in order to actually form the desired composite part using the instantly claimed process.

Concerning claim 4, Appellant argues that the broad interpretation of the language of this claim is not reasonable. But it is noted by the examiner that paragraph [0022] refers to the reshaping of the foil part "in a permanent manner" while the language of claim 4 simply requires "reshaping after step a) and before step b). Thus, the language of claim 4 is not really commensurate in scope with the specification and claim 4 encompasses temporary reshaping. It is still the examiner's position that any change in shape in the foil, whiich could occur during the delivery to a part manufacturer, as described in paragraph [0006], or during its unpacking and/or storage prior to molding, causes claim 4 to be readable on the process of the admitted prior art.

Appellant further argues that the admitted prior art does not suggest the order required by claim 22. It is again noted that the ground of rejection is the admitted prior art in view of Yamazaki. To the examiner, step a) would necessarily occur prior to step b) since the foil part with the protective foil would need to be provided before it is reworked. And step d) would necessarily follow the "placing" of step c) in order to produce the desired composite part.

In rejecting claims 12 and 23, the examiner has relied upon Gossie in addition to the prior art previously dicussed. Appellant argues that the decal of Gossie is not a protective layer that is subsequently removed to show a final exterior surface of an Application/Control Number: 10/849,618 Page 8

Art Unit: 1762

underlying part. But the teaching of the inclusion of such a protective layer is taught by the primary reference, the admitted prior art. Appellant also argues that smoothing with a squeegee cannot be reasonably construed as corresponding to the claimed polishing step. But it is noted by the examiner that the portion of Gossie which was relied upon also includes smoothing by hand to remove blisters or wrinkles or bubbles of air. In addition, Appellant's specification, for example at paragraph [0021] describes polishing in terms of achieving a smooth outer surface on the protective foil. Furthermore, dictionaries define "polishing" in terms of making a surface smooth by use of a rubbing action or friction, for example. Appellant also argues if the process of the admitted prior art were to be modified by the teachings of Gossie, the result would be the application of a decal after the protective foil has been removed from the final composite part. The examiner disagrees in that Gossie teaches one of ordinary skill in the art to remove

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

blisters or wrinkles and bubbles from a film or foil layer by a smoothing or polishing

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Allan R. Kuhns

action.

ALLAN R. KUHNS

CiOL R. Kuls

PRIMARY EXAMINER AU 1732

Art Unit: 1762

Conferees:

Christina Johnson

CHRISTINA JOHNSON SUPERVISORY PATENT EXAMINER

/Jennifer Michener/

Quality Assurance Specialist, TC1700

Jennifer MIchener